



Bay-Delta Water Plan Update: Impacts to NID Water Supply and Opportunities for Healthy Rivers and Landscapes

Frequently Asked Questions

What's the issue? How to provide for imperiled fish in the San Francisco Bay/Sacramento-San Joaquin Delta?

The California State Water Resources Control Board (State Water Board) is working to update an action plan to save the declining fish populations and improve water quality in the San Francisco Bay/Sacramento-San Joaquin Delta.

The State Water Board recently released a [draft staff report](#), which is an environmental assessment of a range of alternate approaches. These include numerous iterations of unimpaired flow and a holistic alternative called the Healthy Rivers and Landscapes Program.

Depending on the State Water Board's decision, NID's viability could be threatened.



What is the unimpaired flow option?

Unimpaired flow is the water that occurs without diversions. The [draft state staff report](#) recommends a "flow-only" approach that would require unimpaired inflows of 55 percent (within a 45-65 percent adaptive range) from rivers and tributaries to the Bay-Delta to support threatened fish. The Yuba and Bear rivers are included.

How would an unimpaired flow approach impact NID and our local communities?

The unimpaired flow alternatives would severely limit the amount of water NID would be allowed to capture and store in its reservoirs. The reduction of allowable diversions would result in large swings of water surface elevations in these reservoirs throughout the year. It would also create water supply constraints leading to more frequent water rationing, especially for NID irrigation water users.

Reduction in available water supplies would cause an increase in water rates, would reduce the production of hydro-power generation, negatively impact recreation in many areas, and cause impact to the many people animals and other species that rely on the NID system for water and habitat.

Why is NID in a unique situation?

Given its location in the headwater region, NID relies extensively on snowpack for its operations. In an average year, NID counts on over 120,000-acre feet of late season runoff as critical supply to its customer base. This snowpack will diminish and become less reliable annually given the effects of climate change.

Sierra snowmelt fills NID reservoirs, such as Jackson Meadows and Bowman in the high country and Scotts Flat in the foothills, and is stored until needed by our local communities. NID water is delivered for agricultural irrigation and also treated for domestic customers.

Because NID is reliant on Sierra snowmelt for its supply of surface water, there isn't an easy Plan B for additional sources. Our region doesn't have aquifers – underground lakes – to provide groundwater. And, the District can't purchase water from other lower-elevation districts. Water doesn't flow uphill. As a result, NID remains vigilant in protecting its water rights and investing in infrastructure and water supply reliability to maintain and improve service levels and revenue.



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Why is an unimpaired flow approach flawed?

First, the effectiveness of a flow-only approach is questionable. The State Water Board's Final Scientific Basis Report (SBR) itself acknowledges that "the specific mechanisms underlying the flow-abundance relationships are generally not resolved" ([Draft Staff Report, Appx. B at 3-8 to 3-9](#)).

There are other serious detriments with the flow-only approach. It would:

- **Only focus on one beneficial use of water (instream flow for fish) without balancing all beneficial water uses.** This would cause impacts to water for drinking, fire suppression, farms and fields, hydroelectric generation, and recreational opportunities
- Ignore the state policy for "One Delta, One Science" and the Delta Science Program's conclusion that **directing more water to a sterile and inhospitable rip-rapped channel in the Delta will not benefit fish or other aquatic species, regardless of how much water is applied.** The Delta Science Program is an open Delta science community that works together to build a common body of scientific knowledge
- Deplete reservoir storage and thus lose the benefit of water storage (including carryover storage) in such a way that will **create greater risk for all beneficial uses during dry years**, such as 2014-15 and 2021-2022. This would have particularly dire effects under various climate change scenarios. Given the state is now driven by a drought-flood cycle, managing water in such an uncertain environment becomes paramount
- **Undermine significant fishery efforts and success stories in areas upstream of the Delta**, which have benefited from integrating functional flows with habitat improvements and partnerships among agencies
- **Result in less surface water recharging groundwater basins** to help California comply with the Sustainable Groundwater Management Act (SGMA) without significant economic impacts
- **Leave less water in storage and affect resiliency.** Less water would be available for water deliveries and hydroelectric-power generation later in the season. And cold reservoir water, used to improve fish-spawning outcomes, would also become scarce.

Example: What would the flow-only option mean for Scotts Flat Reservoir?

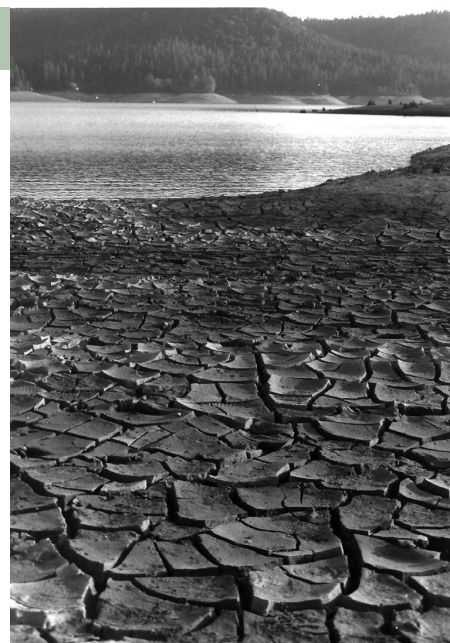
NID's Scott's Flat Reservoir is highly reliant on diverted Sierra water supplies given its own small watershed. Importantly, it provides the water for Nevada County and is the primary source of drinking water supply for NID customers.

Under the proposed unimpaired flow option, Scotts Flat Reservoir is effectively at dead pool in many of the drier year types. This means the amount of water stored in a reservoir is so low, water can no longer flow downstream.

A supply reduction of this magnitude would result in the rationing of water supply throughout NID's service area:

- Domestic supply would take service priority, thereby leaving the irrigation system with little to no supply and dry irrigation canals
- The loss of irrigation water would be catastrophic to the community from agriculture and fire suppression perspectives
- Loss of supply would have a detrimental effect to the environment with small streams and tributaries suffering from the lack of tail waters of NID's canals.

* [see the details with graphs](#)





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What is the holistic Healthy Rivers and Landscapes Program (Agreements)?

NID is in full support of the Healthy Rivers and Landscapes Program (Agreements) as an alternative to the flow-only option presented in the state's draft staff report. The Agreements propose a suite of actions that are far broader with more benefits and fewer impacts than unimpaired flows.

This approach would improve conditions for native fish and habitat restoration, and stress that every drop of water serves a specific, targeted beneficial uses, such as irrigation for agriculture, household drinking water, recreation, and hydropower generation, for example.

The Agreements reduce unintended consequences as a result of severely reducing allowable diversions. Implementation of this holistic program includes flow contributions, the construction of fish habitat projects, multiple funding sources, and governance, science and adaptive management programs. The program is also designed to be adaptive to allow for modifications as needed as time goes on.

Benefits of the Agreements:

- Integrating functional flow and non-flow measures, including habitat restoration and landscape reactivation.
- Building a robust governance program that would oversee the implementation of the Agreements.
- Developing a sound, shared science program that would be the basis for adaptive management decision-making.
- Establishing stable funding sources for implementation.
- Providing for the early implementation of projects to accelerate improvements for fish and wildlife.
- Partnering opportunities with diverse parties that includes participation from state and federal agencies, tribes, public water agencies, and conservation groups.
- Supporting the coequal goals of the Delta of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.

This approach will also allow NID water managers to adapt operations based on real-time conditions and enable broad coordination across watersheds to manage flows for maximal benefits. This more flexible, adaptive management is critical as climate change increases uncertainty and drives extreme conditions.



Who supports the Healthy Rivers and Landscapes Program (Agreements)?

The Agreements are proposed by state, federal and local water leaders, and it has full support of the Nevada Irrigation District (NID).

Specifically, the approach is endorsed by the Secretaries of California's Environmental Protection Agency and Natural Resources Agency, the Directors of the Departments of Water Resources and Fish and Wildlife, the U.S. Bureau of Reclamation, and numerous water districts around the state.



Nevada Irrigation District

